Date: Tue, 23 Aug 94 16:31:10 PDT

From: Info-Hams Mailing List and Newsgroup <info-hams@ucsd.edu>

Errors-To: Info-Hams-Errors@UCSD.Edu

Reply-To: Info-Hams@UCSD.Edu

Precedence: Bulk

Subject: Info-Hams Digest V94 #953

To: Info-Hams

Info-Hams Digest Tue, 23 Aug 94 Volume 94 : Issue 953

Today's Topics:

Can you 6M U.S. coast to coast?

Communications Quarterly , was Qs on no code FCC license and Hardware Daily Summary of Solar Geophysical Activity for 22 August

Greasy Popcorn

Help please identifying a signal
How to Use An Auto Patch
Last issued callsigns table?
Mobile Radio Theft Insurance?
QST the logo/QST the signal --- revisited
Request : Baycom Packet on Linux System

VHF: non-FM Whence QST?

Send Replies or notes for publication to: <Info-Hams@UCSD.Edu> Send subscription requests to: <Info-Hams-REQUEST@UCSD.Edu> Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Info-Hams Digest are available (by FTP only) from UCSD.Edu in directory "mailarchives/info-hams".

We trust that readers are intelligent enough to realize that all text herein consists of personal comments and does not represent the official policies or positions of any party. Your mileage may vary. So there.

Date: Tue, 23 Aug 1994 10:57:53 -0400

From: dog.ee.lbl.gov!agate!howland.reston.ans.net!europa.eng.gtefsd.com!

news.umbc.edu!eff!news.duke.edu!zombie.ncsc.mil!cs.umd.edu!newsfeed.gsfc.nasa.gov!

macgwy-mac2.gsfc.@@ihnp4.ucsd.edu

Subject: Can you 6M U.S. coast to coast?

To: info-hams@ucsd.edu

In article <33brdq\$nrf@search01.news.aol.com>, sbjohnston@aol.com
(SBJohnston) wrote:

> In article <srphillips.10.000D474B@ccgate.dp.beckman.com>,

```
> srphillips@ccgate.dp.beckman.com (Steve Phillips) writes:
> 
> Can you 6M U.S. coast to coast?
> >If so, how much power and what antenna type is best?
```

During Field Day this year, 6 meters was wide open. I worked the west coast from here at the Goddard Space Flight Center using a 4 element beam and 10 watts.

the doddard Space Fright Center daring a 4 element beam and to watts.

One tip I have found is that if 2-meters seems open (or 10) there's a good chance that 6 will be as well.

Jim Blackwell, N3KWU

- -

Jim Blackwell Goddard High Resolution Spectrograph Science Support Computer Sciences Corporation NASA/GSFC Code 681.0 Greenbelt, MD 20771

Date: Tue, 23 Aug 1994 12:29:09 GMT

From: news.cerf.net!gopher.sdsc.edu!news.tc.cornell.edu!

travelers.mail.cornell.edu!news.kei.com!eff!news.umbc.edu!europa.eng.gtefsd.com!

sundog.tiac.net!usenet.elf.com!rpi!@@ihnp4.ucsd.edu

Subject: Communications Quarterly , was Qs on no code FCC license and Hardware

To: info-hams@ucsd.edu

David Stockton (dstock@hpqmdla.sqf.hp.com) wrote:
 C. C. (Clay) Wynn, N4AOX (wyn@ornl.gov) wrote:

: : Well, they are doing it here. The rf shops are full of those contester rigs in

: : for the sparkplug changeouts. One of the biggest problems was finding a cheap

: : second source for those @#\$%& overpriced HP diodes ;-)

[deletions]

More news coming in a subsequent *QST*, but we have discovered that the lower-cost answer--and one that should provide practically the same IMD reduction at amateur frequencies--is to use *Motorola MPN3700* diodes instead of the HPs.

We will also show that 1N4007 rectifier diodes, although they contain PIN

structures that can provide reasonably good IMD performance compared to intended-for-RF-switching PINs like the 3081 and MPN3700 *in forward conduction*, *aren't* a suitable low-cost answer to the 3081 and 3700 because they must be *reverse*-biased to exhibit similar "turned off" IMD dynamic range compared to 3081s and 3700s that simply have forward bias removed.

To answer the begged question ("What do I mean by "lower-cost"?): Allied Electronics carries the HP diodes for (rounded number) \$2 each. Newark Electronics carries the Motorola diodes for (rounded) \$1 each. (I suppose there are volume discounts; haven't factored that in.)

What's also neat is that the Motorola parts are available both in leaded and surface-mount form--important because so many of our radios are now full of SMDs. The leaded part is MPN3700; the surface mount (SOT-23 package) is MMBV3700. Newark carries both; they list the MMBV3700 as MMBV3700L; dunno what the *L* means.

Regards,

David Newkirk, WJ1Z Senior Assistant Technical Editor, *QST*

Date: Mon, 22 Aug 1994 20:58:41 MDT

From: agate!howland.reston.ans.net!torn!nntp.cs.ubc.ca!alberta!ve6mgs!

usenet@ames.arpa

Subject: Daily Summary of Solar Geophysical Activity for 22 August

To: info-hams@ucsd.edu

DAILY SUMMARY OF SOLAR GEOPHYSICAL ACTIVITY

22 AUGUST, 1994

(Based In-Part On SESC Observational Data)

SOLAR AND GEOPHYSICAL ACTIVITY INDICES FOR 22 AUGUST, 1994

!!BEGIN!! (1.0) S.T.D. Solar Geophysical Data Broadcast for DAY 234, 08/22/94 10.7 FLUX=070.6 90-AVG=078 SSN=012 BKI=1201 2212 BAI=004 BGND-XRAY=A1.0 FLU1=8.7E+05 FLU10=1.4E+04 PKI=2211 2233 PAI=008

BOU-DEV=007,011,003,007,010,019,008,019 DEV-AVG=010 NT SWF=00:000 XRAY-MAX= B1.9 @ 0934UT XRAY-MIN= A1.0 @ 2351UT XRAY-AVG= A1.3 NEUTN-MAX= +003% @ 2330UT NEUTN-MIN= -002% @ 0400UT NEUTN-AVG= +0.3% PCA-MAX= +0.3DB @ 1820UT PCA-MIN= -0.2DB @ 0535UT PCA-AVG= +0.1DB BOUTF-MAX=55229NT @ 1336UT BOUTF-MIN=55194NT @ 2020UT BOUTF-AVG=55213NT GOES7-MAX=P:+000NT@ 0000UT GOES7-MIN=N:+000NT@ 0000UT G7-AVG=+083,+000,+000 GOES6-MAX=P:+146NT@ 1931UT GOES6-MIN=N:-024NT@ 2239UT G6-AVG=+111,+029,-004 FLUXFCST=STD:070,070,070;SESC:070,070,070 BAI/PAI-FCST=010,015,010/010,015,010 KFCST=2225 5112 2225 5112 27DAY-AP=006,011 27DAY-KP=1212 1223 3522 1223 WARNINGS= ALERTS= !!END-DATA!!

NOTE: The Effective Sunspot Number for 21 AUG 94 was 23.0.

The Full Kp Indices for 21 AUG 94 are: 3- 2- 1- 10 30 3+ 20 1+

The 3-Hr Ap Indices for 21 AUG 94 are: 12 7 3 4 14 18 8 5

Greater than 2 MeV Electron Fluence for 22 AUG is: 1.2E+07

SYNOPSIS OF ACTIVITY

Solar activity was very low.

Solar activity forecast: solar activity is expected to be very low.

The geomagnetic field has been at quiet levels for the past 24 hours.

Geophysical activity forecast: the geomagnetic field is expected to be quiet to unsettled for the entire forecast period. High latitude stations may experience short periods of active levels, especially during local nighttime.

Event probabilities 23 aug-25 aug

Class M 01/01/01 Class X 01/01/01 Proton 01/01/01 PCAF Green

Geomagnetic activity probabilities 23 aug-25 aug

A. Middle Latitudes

Active 15/30/20
Minor Storm 05/15/10
Major-Severe Storm 01/05/05

B. High Latitudes

Active 25/30/30
Minor Storm 15/15/15
Major-Severe Storm 05/05/05

HF propagation conditions were near-normal over all regions. No changes are forecast for the next 72 hours. There is only a slight chance high-latitude paths may be periodically degraded during the local night-times, particularly on transauroral circuits. Overall global conditions should remain near-normal.

COPIES OF JOINT USAF/NOAA SESC SOLAR GEOPHYSICAL REPORTS

REGIONS WITH SUNSPOTS. LOCATIONS VALID AT 22/2400Z AUGUST

NMBR LOCATION LO AREA Z LL NN MAG TYPE
7767 \$14W36 313 0020 HSX 02 002 ALPHA
7764 \$08W81 358 PLAGE
7766 N09W61 338 PLAGE
7768 \$14W28 305 PLAGE
REGIONS DUE TO RETURN 23 AUGUST TO 25 AUGUST
NMBR LAT LO
NONE

LISTING OF SOLAR ENERGETIC EVENTS FOR 22 AUGUST, 1994

BEGIN MAX END RGN LOC XRAY OP 245MHZ 10CM SWEEP 0929 0933 0936 B1.9 800

POSSIBLE CORONAL MASS EJECTION EVENTS FOR 22 AUGUST, 1994

BEGIN MAX END LOCATION TYPE SIZE DUR II IV
NO EVENTS OBSERVED

INFERRED CORONAL HOLES. LOCATIONS VALID AT 22/2400Z

ISOLATED HOLES AND POLAR EXTENSIONS
EAST SOUTH WEST NORTH CAR TYPE POL AREA OBS
NO DATA AVAILABLE FOR ANALYSIS

SUMMARY OF FLARE EVENTS FOR THE PREVIOUS UTC DAY

Date Begin Max End Xray Op Region Locn 2695 MHz 8800 MHz 15.4 GHz ------- ----- -----21 Aug: 0507 0512 0516 C1.5

REGION FLARE STATISTICS FOR THE PREVIOUS UTC DAY

S 1 2 3 4 Total (%) C M X -- -- ---- -- -- -- --- ----0 0 0 0 0 001 (100.0) Uncorrellated: 1 0 0

Total Events: 001 optical and x-ray.

EVENTS WITH SWEEPS AND/OR OPTICAL PHENOMENA FOR THE LAST UTC DAY

Date Begin Max End Xray Op Region Locn Sweeps/Optical Observations NO EVENTS OBSERVED.

NOTES:

All times are in Universal Time (UT). Characters preceding begin, max, and end times are defined as: B = Before, U = Uncertain, A = After. All times associated with x-ray flares (ex. flares which produce associated x-ray bursts) refer to the begin, max, and end times of the x-rays. Flares which are not associated with x-ray signatures use the optical observations to determine the begin, max, and end times.

Acronyms used to identify sweeps and optical phenomena include:

= Type II Sweep Frequency Event II

= Type III Sweep III TV = Type IV Sweep = Type V Sweep

Continuum = Continuum Radio Event Loop = Loop Prominence System,

Spray = Limb Spray,
Surge = Bright Limb Surge,
EPL = Eruptive Prominence on the Limb.

** End of Daily Report **

Date: 23 Aug 94 02:20:26 GMT

From: elroy.jpl.nasa.gov!swrinde!emory!europa.eng.gtefsd.com!news.umbc.edu!eff! news.duke.edu!duke!wolves!psybbs!org!fidonet!z1!n3641!f1!p1!Ken.Kuzenski@ames.arpa

Subject: Greasy Popcorn To: info-hams@ucsd.edu

>>> - U.S. President Bill Clinton, 1994

>> Where did you get this jewel of Billywisdom?

j> Slick Willie said this in a press conference when he was

Just my personal opinion, but I'd rather see this remain free of political argument.

Date: Tue, 23 Aug 94 08:20:12 EDT

From: agate!howland.reston.ans.net!darwin.sura.net!opusc!

UNIVSCVM.CSD.SCAROLINA.EDU!T230579@ames.arpa Subject: Help please identifying a signal

To: info-hams@ucsd.edu

>>high of my listening frequency. The signal consisted of 5 character >>groups of what appeared to be random letters. The data rate is quite > >What are these characters then?

`yeah, I'd like to know that too...That would be 60% of the analysis/answer...

Date: Tue, 23 Aug 1994 16:16:39 GMT From: rd1.racal.com!news@uunet.uu.net Subject: How to Use An Auto Patch

To: info-hams@ucsd.edu

In article j1q@prodsql.prodigy.bc.ca, Paul Antaki <pantaki@prodigy.bc.ca> writes: >Since I'm new to radio and don't really know any fellow amateurs I turn >to the net for assistance:

I've seen that you got some good answers about clubs and financial support, but let me add another twist.

Our company club sponsers three repeaters all with autopatches. Two of the repeaters

are open. Because we are a company sponsered club we cannot accept members who are not employed by Racal. In addition since the patches are connected to the company PBX we cannot, by company decree, open the patches to non-members.

It is always best to ask before trying to access a patch belonging to a group of which you are not a member. Those who try to access ours are politely informed of our policy. If they persist the machine is turned off by a control operator.

73

Rich

Date: Tue, 23 Aug 1994 10:53:47 -0400

From: ihnp4.ucsd.edu!dog.ee.lbl.gov!agate!howland.reston.ans.net! europa.eng.gtefsd.com!news.umbc.edu!haven.umd.edu!cs.umd.edu!

```
newsfeed.gsfc.nasa.gov!macgwy-mac2.gsfc.nasa.gov!user@network.
Subject: Last issued callsigns table?
To: info-hams@ucsd.edu
In article <336c20$9vm@search01.news.aol.com>, tstader@aol.com (TSTADER) wrote:
> In article <333hpu$4n0@dolphin.phoenix.net>, jracz@phoenix.phoenix.net
> (Jeff Racz) writes:
> As far as I can tell... the one for August 1st has not been released...
> judging from the date of last months... I don't expect it for another
> couple of days!
> 73 for now.... c u on the shortwaves
> Terry Stader - KA8SCP
> America Online Ham Radio Club Host
> Internet: tstader@aol.com (files <28K) or
           tstader@si.tiac.net (files >28K)
> KA8SCP@WA1PHY.#EMA.MA.USA.NOAM
> ka8scp@ka8scp.ampr.org [44.56.4.82]
Does anyone know where/how to get this information ?
Jim Blackwell, N3KWU
Jim Blackwell
Goddard High Resolution Spectrograph Science Support
Computer Sciences Corporation
NASA/GSFC Code 681.0
Greenbelt, MD 20771
_____
Date: 23 Aug 1994 09:32:20 -0500
From: ihnp4.ucsd.edu!agate!howland.reston.ans.net!cs.utexas.edu!not-for-
mail@network.ucsd.edu
Subject: Mobile Radio Theft Insurance?
To: info-hams@ucsd.edu
<1994Aug17.143959.23702@mixcom.mixcom.com> wrote:
: In <dginsberg-1608941254300001@198.207.32.23> dginsberg@gte.com (Don Ginsberg)
writes:
: >Does anyone know of specialized insurance companies that
: >will sell a stand-alone policy on ham radio equipment
: >mounted in your car. I believe that the ARRL has such
: >a service. Anyone know of others? An idea of prices?
```

Contact the ARRL directly and they will provide you with information. I beleive they use Albert Wohler Insurance Agency. The same agency has been handling their claims for years. It is an excellent program, and includes insurance on all your equipment - whether lost or stolen, including lightning protection (except antennas).

ARRL phone number is 203-666-1541. Just ask the operator about the ARRL equipment insurance and she'll point you in the right direction.

- -

Marc Grant | Sr. Systems Engineer | Unit EA-83240 marcbg@esy.com | E-Systems Garland Division | POB 660023 | 214-205-4593 | Dallas, TX 75266-0023

"Opinions expressed are my own and not necessarily those of E-Systems Inc."

Date: 23 Aug 1994 17:05:43 GMT

From: agate!howland.reston.ans.net!europa.eng.gtefsd.com!uhog.mit.edu! news.kei.com!yeshua.marcam.com!charnel.ecst.csuchico.edu!olivea!news.bu.edu!

taco.cc.ncsu.edu!csemail.@@ihnp4.ucsd.edu

Subject: QST the logo/QST the signal --- revisited

To: info-hams@ucsd.edu

OK Dave, you win this quibble....

>From Dave Newkirk, WJ1Z at QST (arrl.org):

>Historiographical quibble: ARRL didn't borrow *QST* as its logo for the >magazine; because *QST* magazine wasn't bought by ARRL until 1919. *QST* was >originally owned and published by ARRL's cofounders, Clarence D. Tuska and >Hiram P. Maxim. Why did they and not the entity called ARRL start/own *QST* >at first? Because they had just founded ARRL, and ARRL the entity therefore >had no money worth mentioning. (Almost at once, by the way, the light came >on a bit more brightly and they incorporated as the QST Publishing Co to >protect themselves in case the new venture went bankrupt.) In no way did >they start *QST* as a money-making venture; it was nip and tuck--largely >nip--until they threw in the towel in the face of WW I and the resulting >government closedown of Amateur Radio.

>Regards,

>David Newkirk, WJ1Z
>Senior Assistant Technical Editor, *QST*

OK, I worded that incorrectly. I should have mentioned that Hiram and

Clarence were the ones who footed the bill out of their pocket, technically before ARRL took it over. Clarification, noted. There was a note in the front of the premier issue to that effect, but I was not thinking about that at the time. Hence, technically Hiram and Clarence borrowed the QST logo from QST the signal.

Granted QST was not originally set up as a money-making matter. It was, in reality, something like the several large club newsletters that have been published over the years, even to this day. QST just took off, tho, where the others basically stayed with the club level interest. Back in the 1920's and 1930's there were several large club newsletters that were works of art and great fun to read (based upon the few surviving copies I have seen).

But, the question of where the QST as a logo or other historical radio notation originated is still a bit up for further discussion and general clarification. In reading what early issues of QST and other various radio documents and books that I have in my library or have been able to find (complete QST to 1922, but with holes back to the premier issue, and most of the major radio books dating from E. Bucher's works in 1917), it is not exactly clear from whence the logo originated. My contention is that Hiram and Clarence borrowed it from the standard commercial Q-signals of the day, that should have originated at about the time of the Titanic sinking. My sources only go back to 1921, where I can trace it to the Radio Communication Pamphlet No. 40 of the Signal Corps, dating from May, 1921 (see appendix 7 page 566). The implication from that appendix is that it was a standard government list of signals, "to be used for all general public service radio communication", and that suggests that it came into being with the Safety of Life conventions in 1910/1912 or so. The accepted designation for the signal QST is ``General call to all stations'' or the interrogatory form ``Have you received the general call to all stations?'' Hence, Hiram and Clarence would have borrowed if from there, since it was a nice way to say in print `This is a general call to to all stations.''

There are a number of ham folks who are of the opinion that it was invented by the boys at ARRL/QST (to include Hiram and Clarence). It was not. That was the point I was trying to make.

Any further clarification you have on this matter, official or unofficial, as long as it can be traced somewhere, is most welcome. I am having trouble finding records predating WWI.

73
Bob
NA4G
rdkeys@csemail.cropsci.ncsu.edu

Date: 23 Aug 1994 13:26:36 +0200

From: olivea!spool.mu.edu!howland.reston.ans.net!EU.net!ub4b!

idefix.CS.kuleuven.ac.be!rc1.vub.ac.be!info.vub.ac.be!info.vub.ac.be!not-for-

mail@ames.arpa

Subject: Request : Baycom Packet on Linux System

To: info-hams@ucsd.edu

Does anyone know how I can hook up my Baycom Packet Modem to a Linux/Unix System ?

Is there software available comparable to the PC/MS-DOS soft Baycom1.5 for a Linux System ??

Date: 23 Aug 94 16:51:48 GMT

From: news.cerf.net!gopher.sdsc.edu!nic-nac.CSU.net!charnel.ecst.csuchico.edu!

yeshua.marcam.com!news.kei.com!eff!news.duke.edu!convex!cs.utexas.edu!

howland.reston.ans.net!agate@ihnp4.ucsd.edu

Subject: VHF: non-FM
To: info-hams@ucsd.edu

Just a reminder: A mailing list exists for those interested in non-FM VHF+ operation. To subscribe, send mail to:

vhf-request@w6yx.stanford.edu

with the message:

subscribe vhf

Volume averages about three messages per day.

- -

```
-=Paul Flaherty, N9FZX | "We are meant to be masters of destiny, ->paulf@Stanford.EDU | not victims of fate." -- Ronald W. Reagan
```

Date: Tue, 23 Aug 1994 12:41:52 GMT

From: news.cerf.net!gopher.sdsc.edu!news.tc.cornell.edu!

travelers.mail.cornell.edu!news.kei.com!eff!news.umbc.edu!europa.eng.gtefsd.com!

sundog.tiac.net!usenet.elf.com!rpi!@@ihnp4.ucsd.edu

Subject: Whence QST?
To: info-hams@ucsd.edu

Stan Olochwoszcz N2AYJ (n2ayj@n2ayj.overleaf.com) wrote:

[neat stuff from R. D. Keys, NA4G, about meaning and use of the Q-signal *QST* deleted; following excerpt is Bob Keys's copy]

: QST was borrowed by the ARRL as its logo for the magazine in 1915, starting

: with the first issue, since it was the ham equivalent of a "general

: call to all stations", in print.

Historiographical quibble: ARRL didn't borrow *QST* as its logo for the magazine; because *QST* magazine wasn't bought by ARRL until 1919. *QST* was originally owned and published by ARRL's cofounders, Clarence D. Tuska and Hiram P. Maxim. Why did they and not the entity called ARRL start/own *QST* at first? Because they had just founded ARRL, and ARRL the entity therefore had no money worth mentioning. (Almost at once, by the way, the light came on a bit more brightly and they incorporated as the QST Publishing Co to protect themselves in case the new venture went bankrupt.) In no way did they start *QST* as a money-making venture; it was nip and tuck--largely nip--until they threw in the towel in the face of WW I and the resulting government closedown of Amateur Radio.

Regards,

David Newkirk, WJ1Z Senior Assistant Technical Editor, *QST*

Date: Tue, 23 Aug 1994 13:33:09 GMT

From: ihnp4.ucsd.edu!dog.ee.lbl.gov!agate!howland.reston.ans.net!

europa.eng.gtefsd.com!sundog.tiac.net!usenet.elf.com!rpi!psinntp!arrl.org!

zlau@network.ucsd.edu

To: info-hams@ucsd.edu

References <wyn.134.2E5352E5@ornl.gov>, <Cuxs3v.Gru@hpqmoea.sqf.hp.com>, <1994Aug23.122909.8660@arrl.org>d.

Subject : Re: Communications Quarterly , was Qs on no code FCC license and Hardware

Dave Newkirk (WJ1Z) (dnewkirk@arrl.org) wrote:

- : We will also show that 1N4007 rectifier diodes, although they contain PIN
- : structures that can provide reasonably good IMD performance compared to
- : intended-for-RF-switching PINs like the 3081 and MPN3700 *in forward
- : conduction*, *aren't* a suitable low-cost answer to the 3081 and 3700
- : because they must be *reverse*-biased to exhibit similar "turned off"
- : IMD dynamic range compared to 3081s and 3700s that simply have forward bias
- : removed.

Maybe that is why I've had no trouble using 1N4007 rectifier diodes--my inexpensive biasing technique using 470 ohm resistors does *reverse* bias those diodes during turn-off. People have commented to me that they tried them and they didn't work but they work fine for me. :-).

- -

Zack Lau KH6CP/1 2 way QRP WAS

8 States on 10 GHz

Internet: zlau@arrl.org 10 grids on 2304 MHz

End of Info-Hams Digest V94 #953 ***********